

On Mechanisms of Change in Psychodynamic Therapy

Falk Leichsenring¹, Christiane Steinert^{1,2}, Paul Crits-Christoph³

Zusammenfassung

Wirkmechanismen psychodynamischer Therapie

Hintergrund: Es gibt eine wachsende Evidenz für die Wirksamkeit psychodynamischer Therapie. Einige Vertreter anderer Therapierichtungen stellen jedoch wiederholt die Wirksamkeit psychodynamischer Therapie infrage. In letzter Zeit findet sich eine weitere Argumentationslinie die behauptet, psychodynamische Therapie sei zwar möglicherweise wirksam, aber die Wirkmechanismen, die ihren Effekten zu Grunde liegen, seien nicht klar oder könnten sogar grundsätzlich nicht empirisch geprüft werden.

Ziel der vorliegenden Arbeit: Diese Behauptungen sollen anhand theoretischer und empirischer Vorarbeiten kritisch geprüft werden.

Ergebnis: Die Behauptungen, Wirkmechanismen psychodynamischer Therapie seien nicht überprüft und nicht überprüfbar, erweisen sich als überwiegend nicht haltbar.

Schlussfolgerungen: Es gibt Evidenz sowohl für die Wirksamkeit psychodynamischer Therapie als für deren angenommene Wirkmechanismen. Die von manchen Vertretern anderer Therapierichtungen immer wieder vorgebrachte Kritik scheint eher politisch als wissenschaftlich motiviert. Weitere Forschung zur Wirksamkeit und zu den Wirkmechanismen psychodynamischer Therapie ist notwendig.

Z Psychosom Med Psychother 64/2018, 16–22

Keywords

Psychodynamic Therapy – Mechanisms of Change – Empirical Evidence

Summary

Background: There is a growing body of evidence for the efficacy of psychodynamic therapy. Some representatives of other approaches, however, have repeatedly questioned its efficacy. Recently, another line of argumentation emerged, claiming that psychodynamic therapy may work, but that the mechanisms of change underlying its effects were not clear or even could not be tested empirically at all.

Objective: The present article critically reviews these allegations.

Results: The allegations put forward were shown to be mostly untenable. Mechanisms of change of psychodynamic therapy are testable and have been tested empirically.

Conclusions: There is evidence for both the efficacy of psychodynamic therapy and for the assumed mechanisms of change. The repeatedly presented critique by representatives of other

¹ University of Giessen, Department of Psychosomatics and Psychotherapy.

² MSB Medical School Berlin, Department of Psychology.

³ University of Pennsylvania, Department of Psychiatry.

approaches seems to be motivated more by political than by scientific reasons. However, further research on both the outcome and process of psychodynamic therapy is required.

There is growing evidence for the efficacy of psychodynamic therapy (Abbass et al. 2014; Leichsenring et al. 2015a; Leichsenring et al. 2015b; Steinert et al. 2017). However, several biases or “myths” towards psychodynamic therapy (PDT) are kept alive, including, for example, a distorted depiction of psychodynamic theory based on caricatured versions of early psychoanalytic assumptions (e.g., repressed libido as the only dynamic force) while ignoring contemporary psychodynamic approaches (Abbass et al. 2017). Further biases include the exclusion or distortion of evidence for PDT in treatment guidelines, the exclusion of psychodynamic researchers from funding and guideline committees, the use of neutered versions of PDT in randomized controlled trials (“straw man” bias) or biased study selection in meta-analyses (Abbass et al. 2017).

More specifically, some representatives of other approaches have repeatedly questioned the evidence for PDT, claiming for example, that PDT is only as efficacious as placebo (Mayo-Wilson et al. 2014), not more efficacious than a waiting list condition (Zhou et al. 2015) or inferior to cognitive-behavioral therapy (CBT, Marcus et al. 2014). These claims were shown to be untenable (Abbass et al. 2017; Leichsenring et al. 2016; Leichsenring & Rabung 2013). The most recent meta-analysis showed that PDT is as efficacious as treatments established in efficacy, including CBT (Steinert et al. 2017).

Recently, another line of argumentation emerged, claiming that PDT may work, but that the mechanisms of change underlying its effects were not clear. The study by Milrod et al. (2007) for example, showing that PDT is superior to applied relaxation in panic disorder, has been questioned for these reasons (McKay et al. 2007). Thus, the American Psychological Association’s Division 12 Task Force on Psychological Interventions comments on this study as follows (American Psychological Association’s Division 12 Task Force): “The evidence for psychoanalytic treatment for panic disorder is somewhat controversial, insofar as the conceptual basis for this treatment has not been tested. That is, although psychoanalytic psychotherapy appears to work, it is not yet clear that the treatment works via the reduction of unconscious conflicts – the proposed mechanisms of change.” It is of note that for CBT mechanisms of change have not yet been firmly established (Kazdin 2007, p. 1): “. . . after decades of psychotherapy research, we cannot provide an evidence-based explanation for how or why even our most well studied interventions produce change, that is, the mechanism(s) through which treatments operate.” Thus, when evaluating the evidence for psychotherapy some kind of double standard seems to be applied: mechanisms of change for both, PDT and CBT (for panic disorder) are not yet firmly established, but only the evidence for PDT is labelled as “controversial” by the APA. Patients seeking information on the APA site will be discouraged and misled by this information.

In a recent article Hoffart and Johnson (2017) even alleged that for PDT in general the underlying mechanisms of change cannot be tested empirically. Due to its highly

generalized claim addressing PDT in general, Hoffart and Johnson's (2017) article deserves a critical discussion.

From the conceptualizations of mental disorders inherent in the therapeutic theories of Supportive-Expressive Therapy (SET, Leichsenring et al. 2007; Leichsenring et al. 2013; Luborsky 1984) and Cognitive Therapy (CT, Clark & Wells 1995) for social anxiety disorder (SAD), Hoffart and Johnson (2017) conclude that in contrast to CT and CBT mechanisms of change of SET in particular and of PDT in general cannot be tested empirically. This conclusion is questionable for several reasons that we will discuss in the following.

1. Hoffart and Johnson (2017) focus on the concept of the Core Conflictual Relationship Theme (CCRT) assumed by the SET model to underlie the symptoms of SAD. – A CCRT includes a wish component that can be conscious or unconscious (e.g., for affirmation or admiration), a response of others component (e.g., “others will humiliate me”), and a response of self-component (e.g., “I am afraid of social contacts” or “I rather avoid social situations”). Hoffart and Johnson (2017) emphasize that the CCRT overlaps with the symptoms of SAD. For this reason, they conclude showing a relationship between a change in the CCRT and a reduction of SAD symptoms cannot be regarded as an independent proof of a mechanism of change, because focusing on and modifying the CCRT is a mediator of symptom improvement. The authors in fact address an interesting issue. In SAD, the response of others component (RO) of the CCRT usually includes a fearful interpersonal expectation (e.g., others will humiliate me), making it indeed difficult to fully separate the RO component of the CCRT from and test it independently of SAD symptoms. The authors' observation is therefore correct. In other mental disorders, however, where symptoms do not include an interpersonal component, for example in depressive disorders (Vanheule et al. 2006), this is not the case. Thus, the CCRT does not necessarily overlap with the symptoms of a mental disorder and in fact SAD can rather be seen as an exception than a rule. – By the way, cognitions in CBT may overlap with symptoms as well.
2. Furthermore, there is usually not only one CCRT characteristic of all patients with a specific disorder (Crits-Christoph et al. 1995), thus not all CCRTs necessarily overlap with the primary outcome.
3. In contrast to the RO component, the wish component of the CCRT can in fact be empirically examined even in SAD without including an overlap with the symptoms of SAD. – The wish for affirmation, for example, may be related to symptoms of SAD or not, with the latter indicating no psychopathology, and changes in the wish component of the CCRT may be related to changes in SAD symptoms (corroborating the CCRT model) or not (refuting the CCRT model), and they may occur prior to changes in symptoms (indicating a mediator) or not (not indicative of a mediator). – In a heterogeneous patient sample, the pervasiveness of the wish component was shown to be independent of the RO component and to significantly predict changes in symptoms (Crits-Christoph & Luborsky 1990, pp. 139, 141).
4. Hoffart and Johnson's (2017, p. 11) assumption that a subject's position on the CCRT is a “constant,” not explaining within-subject variations in symptoms rel-

ative to the CCRT is based on a questionable conceptualization of a core conflict. Within a subject, a CCRT can be activated to a stronger or less strong degree, depending on several internal and external parameters, e.g., whether the subject is confronted with friends vs. a boss perceived as hostile, which of the subject's internalized object relations are activated (RO), the momentary strength of the wish, or the type of defense mechanisms applied in a specific situation (RS). These issues are worked-through in SET on the level of momentary and observable feelings and behaviors. Thus, testable predictions can in fact be derived from the SET model.

5. An overlap between outcome and CCRT (or other methods, see below) existing in some disorders may be eliminated by defining outcome by items or measures not including interpersonal aspects.
6. Other methods not overlapping with outcome may be used to examine mechanisms of change, for example, the self-understanding scale (Connolly Gibbons et al. 2009) or the reflective functioning scale (e.g., Fischer-Kern et al. 2015). As another approach, treatment-specific interventions may be tested with regard to their relation to outcome (e.g., Barber et al. 1996; Crits-Christoph et al. 1988).

Thus, there is no reason why mechanisms of change cannot be tested in SET or PDT.

Hoffart and Johnson's (2017) conclusions are not tenable, the authors generalize from SAD to other mental disorders, from the RO component to the wish component of the CCRT, from CCRT to other methods for examining mechanisms of change, from SET to PDT and from cognitive therapy to CBT which is questionable, assuming uniformity.

Furthermore, it is of interest that apparently no representative of PDT was involved by Hoffart and Johnson when discussing psychodynamic models, that is they did not establish a form of "adversarial collaboration" (e.g., Mellers et al. 2001), necessary to come to balanced conclusions.

And finally, it is also of note that Hoffart has published along with Clark on CT of SAD (Hoffart et al. 2016). For this reason, a researcher allegiance in favour of CT cannot be ruled out.

Conclusions

There is substantial evidence for PDT (Abbass et al. 2014; Leichsenring et al. 2015a; Leichsenring et al. 2015b). No substantial differences in efficacy between the different psychotherapeutic approaches have been found (Cuijpers et al. 2014; Driessen et al. 2015; Keefe et al. 2014). Furthermore, the quality of studies for PDT does not differ from that of other approaches such as CBT (Thoma et al. 2012). It is true that few mechanisms of change have been established in psychotherapy research (Crits-Christoph et al. 2013). However, in a review of mechanisms of change in dynamic therapy, it was found that, in five of six studies, change in insight was significantly related to outcome, and in three studies change in defensive

functioning was related to outcome (Crits-Christoph et al. 2013). Furthermore, improvement in another important dynamic therapy mechanism measure, namely reflective functioning, has been found to be associated with outcome of dynamic therapy for major depressive disorder (Bressi et al. 2017) and borderline personality disorder (De Meulemeester et al. 2017; Fischer-Kern et al. 2015). Although full mediational analyses documenting change in the mechanism measure (i.e., the mediator) predicting subsequent outcome are rare for any psychotherapy, at least three studies have found that change in a dynamic mechanism measure (insight) predicts subsequent outcome of PDT (Connolly Gibbons et al. 2009; Johansson et al. 2010; Kallestad et al. 2010). Thus, biases or “myths” towards PDT (Abbass et al. 2017) are refuted by empirical data. However, further research on both the outcome and process of PDT is required.

Taking evidence on study quality, efficacy and mechanisms of change into account, no form of psychotherapy can presently claim to be the gold standard (Leichsenring & Steinert 2017).

References

- Abbass, A. A., Kisely, S. R., Town, J. M., Leichsenring, F., Driessen, E., De Maat, S., Gerber, A., Dekker, J., Rabung, S., Rusalovska, S., Crowe, E. (2014): Short-term psychodynamic psychotherapies for common mental disorders. *Cochrane Database Syst Rev* CD004687.
- Abbass, A. A., Luyten, P., Steinert, C., Leichsenring, F. (2017): Bias toward psychodynamic therapy: Framing the problem and working toward a solution. *J Psychiatr Pract* 23, 361–365.
- American Psychological Association’s Division 12 Task Force. URL: <https://www.div12.org/psychological-treatments/psychoanalytic-treatment-for-panic-disorder>, accessed 17 10 2017.
- Barber, J. P., Crits-Christoph, P., Luborsky, L. (1996): Effects of therapist adherence and competence on patient outcome in brief dynamic therapy. *J Consult Clin Psychol* 64, 619–622.
- Bressi, C., Fronza, S., Minacapelli, E., Nocito, E. P., Dipasquale, E., Magri, L., Lionetti, F., Barone, L. (2017): Short-term psychodynamic psychotherapy with mentalization-based techniques in major depressive disorder patients: Relationship among alexithymia, reflective functioning, and outcome variables – A pilot study. *Psychol Psychother* 90, 299–313.
- Clark, D., Wells, A. (1995): A cognitive model of social phobia. In: Heimberg, R. G., Liebowitz, M. R., Hope, D. A., Schneider, F. R. (Eds.): *Social phobia: diagnosis, assessment, treatment*, pp 69–93. New York: Guilford.
- Connolly Gibbons, M. B., Crits-Christoph, P., Barber, J. P., Stirman, S. W., Gallop, R., Goldstein, L. A., Temes, C. M., Ring-Kurtz, S. (2009): Unique and common mechanisms of change across cognitive and dynamic psychotherapies. *J Consult Clin Psychol* 77, 801–813.
- Crits-Christoph, P., Cooper, A., Luborsky, L. (1988): The accuracy of therapists’ interpretation and the outcome of dynamic therapy. *J Consult Clin Psychol* 56.
- Crits-Christoph, P., Luborsky, L. (1990): Changes in CCRT pervasiveness during psychotherapy. In: Luborsky, L., Crits-Christoph, P. (Eds.): *Understanding transference: The CCRT method*, pp 133–146. New York: Basic Books.
- Crits-Christoph, P., Wolf-Palacio, D., Ficher, M., Rudick, D. (1995): Brief supportive-expressive psychodynamic therapy for generalized anxiety disorder. In: Barber, J., Crits-Christoph, P. (Eds.): *Dynamic therapies for psychiatric disorders (Axis I)*. New York: Basic Books.

- Crits-Christoph, P., Connolly Gibbons, M. B., Mukherjee, D. (2013): Psychotherapy process outcome research. In: Lambert, M. J. (Ed.): *Bergin and Garfield's handbook of psychotherapy and behavior change*. New York: Wiley.
- Cuijpers, P., Karyotaki, E., Weitz, E., Andersson, G., Hollon, S. D., van Straten, A. (2014): The effects of psychotherapies for major depression in adults on remission, recovery and improvement: a meta-analysis. *J Affect Disord* 159, 118–126.
- De Meulemeester, C., Vansteelandt, K., Luyten, P., Lowyck, B. (2017): Mentalizing as a mechanism of change in the treatment of patients with borderline personality disorder: a parallel process growth modeling approach. *Personal Disord* (Epub ahead of print), doi: 10.1037/per0000256.
- Driessen, E., Hegelmaier, L. M., Abbass, A. A., Barber, J. P., Dekker, J. J., Van, H. L., Jansma, E. P., Cuijpers, P. (2015): The efficacy of short-term psychodynamic psychotherapy for depression: a meta-analysis update. *Clin Psychol Rev* 42, 1–15.
- Fischer-Kern, M., Doering, S., Taubner, S., Horz, S., Zimmermann, J., Rentrop, M., Schuster, P., Buchheim, P., Buchheim, A. (2015): Transference-focused psychotherapy for borderline personality disorder: change in reflective function. *Br J Psychiatry* 207, 173–174.
- Hoffart, A., Borge, F. M., Clark, D. M. (2016): Within-person process-outcome relationships in residential cognitive and interpersonal psychotherapy for social phobia: A reanalysis using disaggregated data. *Journal of Experimental Psychopathology* 7, 671–683.
- Hoffart, A., Johnson, S. U. (2017): Psychodynamic and cognitive-behavioral therapies are more different than you think: conceptualizations of mental problems and consequences for studying mechanisms of change. *Clinical Psychology Science* (Epub ahead of print), doi: 10.1177/2167702617727096.
- Johansson, P., Hoglend, P., Ulberg, R., Amlø, S., Marble, A., Bogwald, K. P., Sorbye, O., Sjaastad, M. C., Heyerdahl, O. (2010): The mediating role of insight for long-term improvements in psychodynamic therapy. *J Consult Clin Psychol* 78, 438–448.
- Kallestad, H., Valen, J., McCullough, L., Svartberg, M., Hoglend, P., Stiles, T. C. (2010): The relationship between insight gained during therapy and long-term outcome in short-term dynamic psychotherapy and cognitive therapy for cluster C personality disorders. *Psychother Res* 20, 526–534.
- Kazdin, A. E. (2007): Mediators and mechanisms of change in psychotherapy research. *Annu Rev Clin Psychol* 3, 1–27.
- Keefe, J. R., McCarthy, K. S., Dinger, U., Zilcha-Mano, S., Barber, J. P. (2014): A meta-analytic review of psychodynamic therapies for anxiety disorders. *Clin Psychol Rev* 34, 309–323.
- Leichsenring, F., Beutel, M., Leibing, E. (2007): Psychodynamic psychotherapy for social phobia: a treatment manual based on supportive-expressive therapy. *Bull Menninger Clin* 71, 56–83.
- Leichsenring, F., Rabung, S. (2013): Zur Kontroverse um die Wirksamkeit psychodynamischer Therapie. *Z Psychosom Med Psychother* 59, 13–32.
- Leichsenring, F., Salzer, S., Beutel, M. E., Herpertz, S., Hiller, W., Hoyer, J., Huesing, J., Joraschky, P., Nolting, B., Poehlmann, K., Ritter, V., Stangier, U., Strauss, B., Stuhldreher, N., Tefikow, S., Teismann, T., Willutzki, U., Wiltink, J., Leibing, E. (2013): Psychodynamic therapy and cognitive-behavioral therapy in social anxiety disorder: a multicenter randomized controlled trial. *Am J Psychiatry* 170, 759–767.
- Leichsenring, F., Leweke, F., Klein, S., Steinert, C. (2015a): The empirical status of psychodynamic psychotherapy – an update: Bambi's alive and kicking. *Psychother Psychosom* 84, 129–148.
- Leichsenring, F., Luyten, P., Hilsenroth, M. J., Abbass, A., Barber, J. P., Keefe, J. R., Leweke, F., Rabung, S., Steinert, C. (2015b): Psychodynamic therapy meets evidence-based medicine: a systematic review using updated criteria. *Lancet Psychiatry* 2, 648–660.

- Leichsenring, F., Abbass, A., Gottdiener, W., Hilsenroth, M., Keefe, J. R., Luyten, P., Rabung, S., Steinert, C. (2016): Psychodynamic therapy: a well-defined concept with increasing evidence. *Evid Based Ment Health* 19, 64.
- Leichsenring, F., Steinert, C. (2017): Is cognitive behavioral therapy the gold standard for psychotherapy?: The need for plurality in treatment and research. *JAMA* 318, 1323–1324.
- Luborsky, L. (1984): *Principles of psychoanalytic psychotherapy. Manual for supportive-expressive treatment*. New York: Basic Books.
- Marcus, D. K., O'Connell, D., Norris, A. L., Sawaqdeh, A. (2014): Is the Dodo bird endangered in the 21st century? A meta-analysis of treatment comparison studies. *Clin Psychol Rev* 34, 519–530.
- Mayo-Wilson, E., Dias, S., Mavranzouli, I., Kew, K., Clark, D. M., Ades, A. E., Pilling, S. (2014): Psychological and pharmacological interventions for social anxiety disorder in adults: a systematic review and network meta-analysis. *Lancet Psychiatry* 1, 368–376.
- McKay, D., Abramowitz, J., Taylor, S., Deacon, B. (2007): Evolving treatments for panic disorder. *Am J Psychiatry* 164, 976–977; author reply 977.
- Mellers, B., Hertwig, R., Kahneman, D. (2001): Do frequency representations eliminate conjunction effects? An exercise in adversarial collaboration. *Psychol Sci* 12, 269–275.
- Milrod, B., Leon, A. C., Busch, F., Rudden, M., Schwalberg, M., Clarkin, J., Aronson, A., Singer, M., Turchin, W., Klass, E. T., Graf, E., Teres, J. J., Shear, M. K. (2007): A randomized controlled clinical trial of psychoanalytic psychotherapy for panic disorder. *Am J Psychiatry* 164, 265–272.
- Steinert, C., Munder, T., Rabung, S., Hoyer, J., Leichsenring, F. (2017): Psychodynamic therapy: As efficacious as other empirically supported treatments? A meta-analysis testing equivalence of outcomes. *Am J Psychiatry* 174, 943–953.
- Thoma, N. C., McKay, D., Gerber, A. J., Milrod, B. L., Edwards, A. R., Kocsis, J. H. (2012): A quality-based review of randomized controlled trials of cognitive-behavioral therapy for depression: an assessment and meta-regression. *Am J Psychiatry* 169.
- Vanheule, S., Desmet, M., Rosseel, Y., Meganck, R. (2006): Core transference themes in depression. *J Affect Disord* 91, 71–75.
- Zhou, X., Hetrick, S. E., Cuijpers, P., Qin, B., Barth, J., Whittington, C. J., Cohen, D., Del Giovane, C., Liu, Y., Michael, K. D., Zhang, Y., Weisz, J. R., Xie, P. (2015): Comparative efficacy and acceptability of psychotherapies for depression in children and adolescents: A systematic review and network meta-analysis. *World Psychiatry* 14, 207–222.

Corresponding author: Prof. Dr. Falk Leichsenring, University of Giessen, Department of Psychosomatics and Psychotherapy, Ludwigstr. 76, 35392 Giessen, Germany, Mail: Falk.Leichsenring@psycho.med.uni-giessen.de